

The 2008 Economic Impact of Indiana's St. Joseph County Parks

A Preliminary Report

What is Economic Impact?

There are many dimensions to economic impact. For example, consider a business establishment that is one of a community's largest employers; or, a commercial facility that creates millions of dollars in property tax receipts. In these cases, significant impact is obvious. In less obvious ways, health care providers, like doctors and hospitals, contribute to the productivity of the workforce; and, educational institutions enhance the skills of employees. Yet another less obvious dimension of economic impact, one that is the focus of this report, looks at the *economic development impact* that derives from an inflow of dollars from *outside* the local community – dollars attributable to the existence of a local entity or event. The attraction of visitors to Indiana's St. Joseph County Park venues is an example of this dimension.

Economic impact analysis is often framed in these economic development terms. Some providers of goods or services have the ability in their normal practice to attract a flow of dollars from persons who reside outside the local area – dollars that are referred to here as *outside income*.¹ As an example, a very common case would be a manufacturer who sells locally created goods in a national market. Dollars thus acquired are used in part to pay local workers and vendors. Then, in a second round of spending, the workers and vendors funnel a portion of those dollars into the area through purchases of local supplies and services that create even more local income and jobs. Thus, as the community acquires new outside income, a complementary *multiplier effect* takes place. That is, the expenditures generate still more income for other producers in successive additional but declining rounds of spending. As a result, new dollars and jobs are created throughout virtually all sectors of the local economy. By the time the effect has run its

¹ In this report, the terms *income* and *revenue* are used interchangeably. Total revenue is dispersed as income among the various factors of production in the form of wages, interest, profit, and rent. As will be indicated on page 4, job creation in this study is a function of the component of total revenue that is labor income.

course, the total dollars and jobs have expanded by a multiple in a process often referred to as an economic “ripple” effect. This phenomenon is viewed as the driving force in the continuing economic development of a local area.

Since a significant number of visitors to St. Joseph County Parks over the years have been non-residents of the County, an analysis of the inflow of outside dollars and the creation of new jobs throughout the local economy was undertaken to quantify the subsequent economic development impact of the Parks in calendar year 2008. The purpose of this report is to give an account of those findings.

Study Methodology.

The methodology employed in this study is an application of the *Export Base Model of Regional Economics*² that is often used in economic impact analysis. Some basic elements of the model, as they apply to the St. Joseph County Parks, are as follows:

Outside Income. Identify all receipts directly³ associated with the Parks and determine the amount of those dollars that have flowed into the area from outside of St. Joseph County.

Saved Income. Identification is also made of receipts that can be considered to be saved income. That is, some local County residents, given the slow economy, may choose to visit a local park rather than travel to an outlying community for recreation. In such instances, then, the Parks have captured local dollars that would have otherwise flowed out of the county. These dollars are referred to as *saved income*.

Job Creation. A calculation is made of the new jobs that are created consistent with the County Parks’ outside income.

Multiplier Effect. Income and employment multipliers are then applied to direct receipts and jobs in order to determine total income and job creation that occurred throughout the local economy. Estimates of income and employment multipliers vary

² In mathematical terms: $\Delta \text{Regional Income} = (\Delta \text{Exports} + \Delta \text{Imports})(\text{Multiplier})$. That is, changes in regional income derive from the sum of dollar increases in exports and decreases in imports (import substitution) times the multipliers applicable to St. Joseph County. In this report, export income is referred to as “outside income.”

³ *Direct effects* are changes associated with an institution’s activities – like an addition of new employees to the overall staff. *Indirect effects* are changes incurring in backward linking industries – like additional purchases from vendors that are required to produce additional output. *Induced effects* are changes in regional household spending patterns caused by changes in income coming from the direct and indirect effects.

from place to place, where the size of the community, the value added (the amount of income created per employee in the sector), and the type of activity involved are important determinants of the size of the multipliers. Data associated with the income and employment multipliers exclusive to St. Joseph County’s “Parks” sector were obtained from Minnesota IMPLAN Group, Inc. of Stillwater, MN.⁴

The Export Base Model provides a means of measuring all of these elements of the economic development impact covered in the study, and are addressed as they relate to the 2008 operations of the County Parks.

Conditions and Assumptions Associated with the Study’s Findings.

Keeping in mind that “outside income” is defined as dollars flowing into St. Joseph County from outside the County, and that “inside income” is derived from within St. Joseph County:

- Given that 17.9 percent of gate fee revenue is “outside income”, the same percentage is assumed to apply to food concessions receipts.
- Where there was no way to assess outside percentages for a program (e.g., Partnered & Leisure Programs; Rookery/Giftshop; and Teacher Workshops), a 25 percent factor is applied.
- Since the Parks are currently experiencing a 5.3 percent increase in visitors, it is assumed that the economic downturn has led more St. Joseph County residents to substitute Park visits for outside recreation, thus creating “saved income.”
- Because grants and gifts fluctuate in amount widely from year-to-year, a five-year average was used in this analysis.
- It is assumed that each outside adult visitor to the Parks accounts for \$20 of daily expenditures for food, fuel, sundries, etc., whereas each child and student visitor accounts for \$10 of daily expenditures.⁵

⁴ IMPLAN is a recognized source for these data that are producible for every county in the United States.

⁵ The South Bend/Mishawaka Convention and Visitors Bureau indicated that a state study prepared for the Bureau provided the \$20 estimate.

- On the assumption that the St. Joseph County data required to compute income and job multipliers would be little changed from a 2005 analysis in another study, an updated compilation of these data was not purchased from IMPLAN.

Study Findings.

Outside Income. Table 1 below summarizes the breakdown of St. Joseph County Park receipts and outside income. (The table does not include tax based appropriations).

Table 1

SOURCE⁶	SUB-TOTAL	OUTSIDE %	OUTSIDE INC.
Weekend Gate Fees & Other Operations	\$ 249,373	20.0 %	\$ 49,875
Administrative Receipts	19,834	45.7 %	9,064
Grants and Gifts	104,440	84.6 %	88,356
Saved Income	8,657		8,657
Daily Expenditures Of Outside Visitors	(Number of outside visitors = 52,463)	(20.0 % of 262,315 total visitors)	786,940
TOTAL*			\$ 942,892

* Tax based appropriations not included.

Job Creation. A portion of each dollar of the County Park’s outside revenues (or outside “sales”) is *labor* income, which can be translated into jobs created. In the case of St. Joseph County’s “Parks” sector, that portion is \$0.47 per dollar. Accordingly, the \$942,892 of outside revenue detailed in Table 1 generates some \$443,159 of labor income; and, an infusion of labor income of that amount is consistent with the creation of **6.7 full-time equivalent direct jobs** in the area economy.

⁶ “Weekend Gate Fees & Other Operations” includes gate fees and annual passes as well as revenue from all interpretive and leisure services such as canoe rental, innertubing, day camp, etc. “Administrative Receipts” includes revenue from short term grants disbursed to the department on a reimbursement basis, as well as Conservation Reserve payments. “Grants and Gifts” includes federal and state grants as well as contributions from individual donors and contributions to the St. Joseph County Parks Foundation.

Multiplier Effect. Multipliers uniquely applicable to St. Joseph County and to the cited sector of the economy are as follows: the income multiplier is 1.88; and, the employment multiplier is 1.68. An income multiplier of 1.88 suggests that for each \$1.00 of direct income generated by the County Parks, an additional \$0.88 of indirect and induced income is produced by the multiplier effect throughout the broader local economy. (Again, refer to footnote 3 for definitions). Similarly, an employment multiplier of 1.68 suggests that for each direct job created by the Parks, the multiplier effect will generate another 0.68 indirect and induced jobs throughout the broader local economy.

Tax Impact. A further economic impact of the County Parks has *not* been estimated in this study. That is, an estimate of tax receipts associated with various aspects of applicable activities, for example sales taxes, fuel taxes, and so forth. Data were not sufficient to make educated estimates regarding this positive effect on government entities.

Total Economic Development Impact.

As will be noted in Table 2, after the appropriate income multiplier is applied, the \$942,892 of outside income added a *total* of \$1,772,637 to the area’s income stream in 2008. Further, this infusion of income created a *total* of 11.3 new full-time equivalent jobs in the community, 4.6 of which were the result of the employment multiplier effect.

Table 2

Summary of the St. Joseph County Parks 2008 Economic Development Impact

Total Direct Outside Income	\$ 942,892
Times: 1.88 Income Multiplier	\$ 1,772,637
Total Direct Employment	6.7
Times: 1.68 Employment Multiplier	11.3

In conclusion, one should note that *these increases in income and employment represent dollars and jobs that would not otherwise exist in the local economy in the absence of the St. Joseph County Parks' presence.*

John E. Peck, Ph.D.
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